

# Anti-Caveolin 1 (pY14) Antibody

Rabbit polyclonal antibody to Caveolin 1 (pY14) Catalog # AP59979

#### **Product Information**

Application WB, IP
Primary Accession Q03135
Other Accession P49817

**Reactivity** Human, Mouse, Rat, Pig, Bovine, Dog, SARS

HostRabbitClonalityPolyclonalCalculated MW20472

### **Additional Information**

Gene ID 857

Other Names CAV; Caveolin-1

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the

N-term region of human Caveolin 1 (pY14). The exact sequence is proprietary.

**Dilution** WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100) IP~~N/A

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

#### **Protein Information**

Name CAV1

**Synonyms** CAV

**Function** May act as a scaffolding protein within caveolar membranes

(PubMed: 11751885). Forms a stable heterooligomeric complex with CAV2 that targets to lipid rafts and drives caveolae formation. Mediates the recruitment of CAVIN proteins (CAVIN1/2/3/4) to the caveolae (PubMed: 19262564). Interacts directly with G-protein alpha subunits and can functionally regulate their activity (By similarity). Involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Its binding to DPP4 induces

T-cell proliferation and NF-kappa-B activation in a T-cell

receptor/CD3-dependent manner (PubMed: 17287217). Recruits CTNNB1 to caveolar membranes and may regulate CTNNB1-mediated signaling through the Wnt pathway (By similarity). Negatively regulates TGFB1-mediated activation of SMAD2/3 by mediating the internalization of TGFBR1 from

membrane rafts leading to its subsequent degradation (PubMed:<u>25893292</u>). Binds 20(S)- hydroxycholesterol (20(S)-OHC) (By similarity).

Cellular Location

Golgi apparatus membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Membrane, caveola; Peripheral membrane protein. Membrane raft. Golgi apparatus, trans-Golgi network {ECO:0000250 | UniProtKB:P33724} Note=Colocalized with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein of caveolae

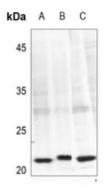
**Tissue Location** 

Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain

## **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Caveolin 1 (pY14). The exact sequence is proprietary.

## **Images**



Western blot analysis of Caveolin 1 (pY14) expression in SGC7901 (A), SGC7901-H2O2-5min (B), HEK293T (C) whole cell lysates.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.